

CLAIMS:

1. An image conversion unit (400,700) for converting an input image with an input aspect ratio into an output image with an output aspect ratio being different from the input aspect ratio, the image conversion unit (400,700) comprising:
 - segmentation means (402) for segmentation of the input image on basis of
5 pixel values of the input image, resulting in a first group of connected pixels forming a first input segment (310) which represents a first object and a second group of connected pixels forming a second input segment (306) which represents a second object; and
 - scaling means (404) for scaling the first input segment (310) in a first direction
10 with a location dependent scaling factor into a first output segment (320) of the output image and for scaling the second input segment (306) in the first direction with a constant scaling factor into a second output segment (316) of the output image.
2. An image conversion unit (700) as claimed in Claim 1, further comprising
15 object tracking means (702) for tracking the second object by establishing that a further input segment in a further input image which belongs to a sequence of video images to which the input image also belongs, corresponds to the second input segment (306), and the scaling means being arranged to scale the further input segment into a further output segment with the constant scaling factor.
- 20 3. An image conversion unit (400,700) as claimed in Claim 1 or 2, further comprising depth ordering means being arranged to establish a depth order between the first input segment (310) and the second input segment (306).
4. An image conversion unit (400,700) as claimed in Claim 3, whereby the depth
25 ordering means are based on one of a set of depth cues comprising: occlusion, relative image sharpness, color, size of segments.
5. An image conversion unit (400,700) as claimed in Claim 1, comprising
merging means for merging the first output segment (320) and the second output segment

(316) resulting in overwriting a part of the pixel values of the first output segment (320) with pixel values of the second output segment (316).

6. An image conversion unit (700) as claimed in Claim 1, comprising input
5 means for accepting user input and scaling determining means for determining the constant scaling factor on basis of the user input.
7. An image conversion unit (400,700) as claimed in Claim 1, whereby the input
10 aspect ratio and the output aspect ratio are substantially equal to values of elements of the set of standard aspect ratios being used in television.
8. An image display apparatus (800) comprising:
- a receiver (502) for receiving an input image;
- an image conversion unit (804) as claimed in any of the claims above; and
15 - a display device (806) for displaying the output image.
9. A method of converting an input image with an input aspect ratio into an
output image with an output aspect ratio being different from the input aspect ratio, the
method comprising:
20 - segmentation of the input image on basis of pixel values of the input image,
resulting in a first group of connected pixels forming a first input segment (310) which
represents a first object and a second group of connected pixels forming a second input
segment (306) which represents a second object; and
- scaling the first input segment (310) in a first direction with a location
25 dependent scaling factor into a first output segment (320) of the output image and for scaling
the second input segment (306) in the first direction with a constant scaling factor into a
second output segment (316) of the output image.
10. A computer program product to be loaded by a computer arrangement,
30 comprising instructions to convert an input image with an input aspect ratio into an output
image with an output aspect ratio being different from the input aspect ratio, the computer
arrangement comprising processing means and a memory, the computer program product,
after being loaded, providing said processing means with the capability to carry out:

- segmentation of the input image on basis of pixel values of the input image, resulting in a first group of connected pixels forming a first input segment (310) which represents a first object and a second group of connected pixels forming a second input segment (306) which represents a second object; and
- 5 - scaling the first input segment (310) in a first direction with a location dependent scaling factor into a first output segment (320) of the output image and for scaling the second input segment (306) in the first direction with a constant scaling factor into a second output segment (316) of the output image.